

**NAME:SYEDA MARIUM FAHEEM**

## **SECTION C**

### **LAB # 2**

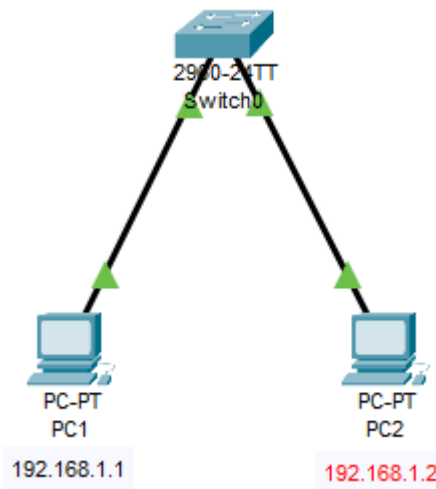
### **SIMULATING METHOD**

#### **Objective**

To become familiar with the network simulator Packet Tracer

#### **CLASS ASSIGNMENTS**

- TOPOLOGY**



- **CONFIGURATION**  
**PC1:**

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

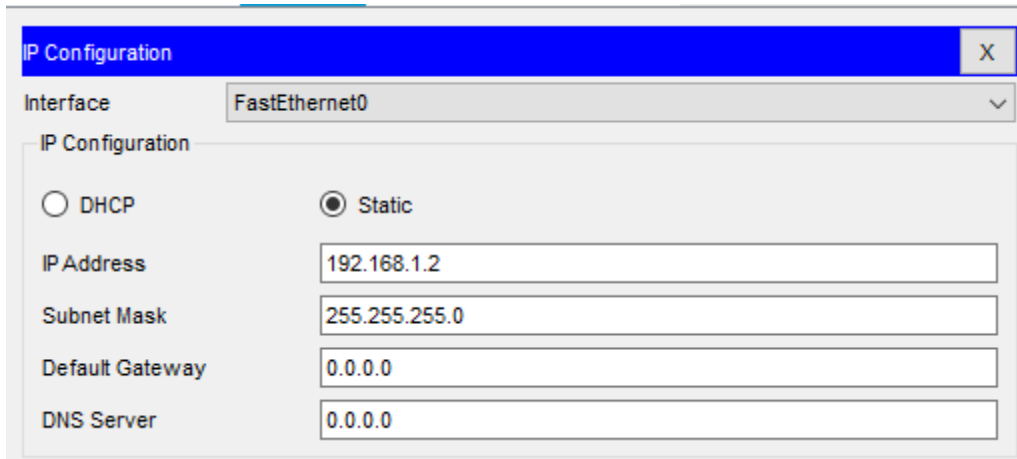
IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

**PC2:**

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 192.168.1.2

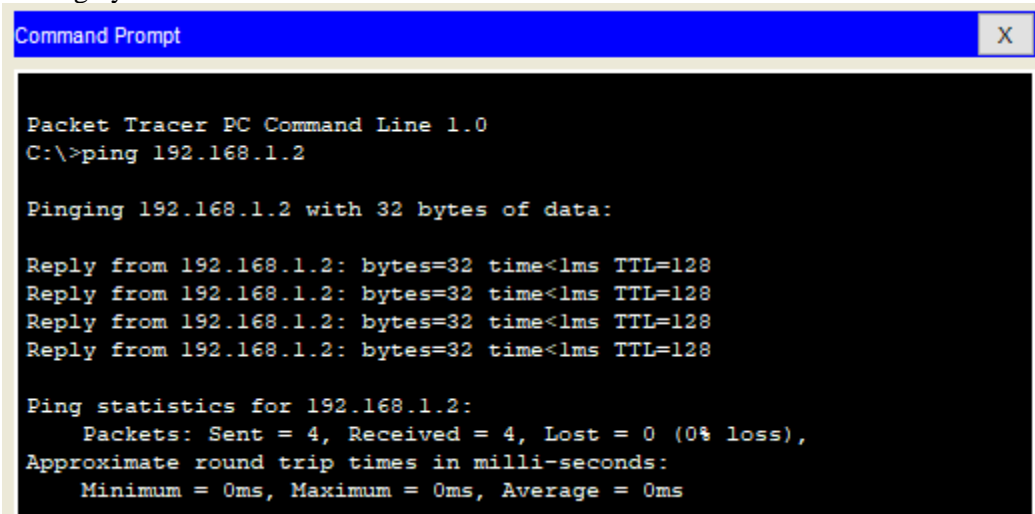
Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

**Results:**

Successful Ping by PC1 to PC2



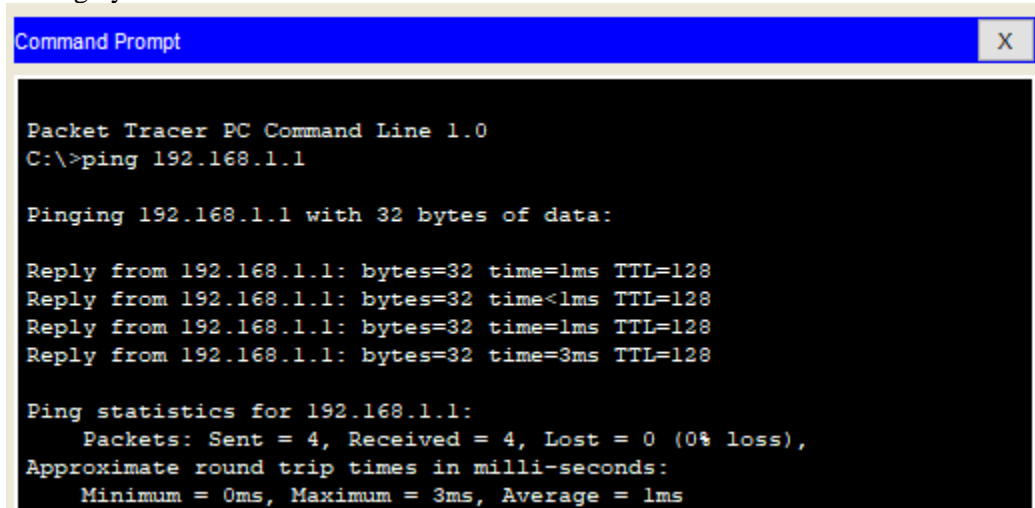
```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Successful Ping by PC2 to PC1



```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time=1ms TTL=128
Reply from 192.168.1.1: bytes=32 time=3ms TTL=128

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 1ms
```

## HOME ASSIGNMENTS

Q 1: Differentiate between three simulation methods.

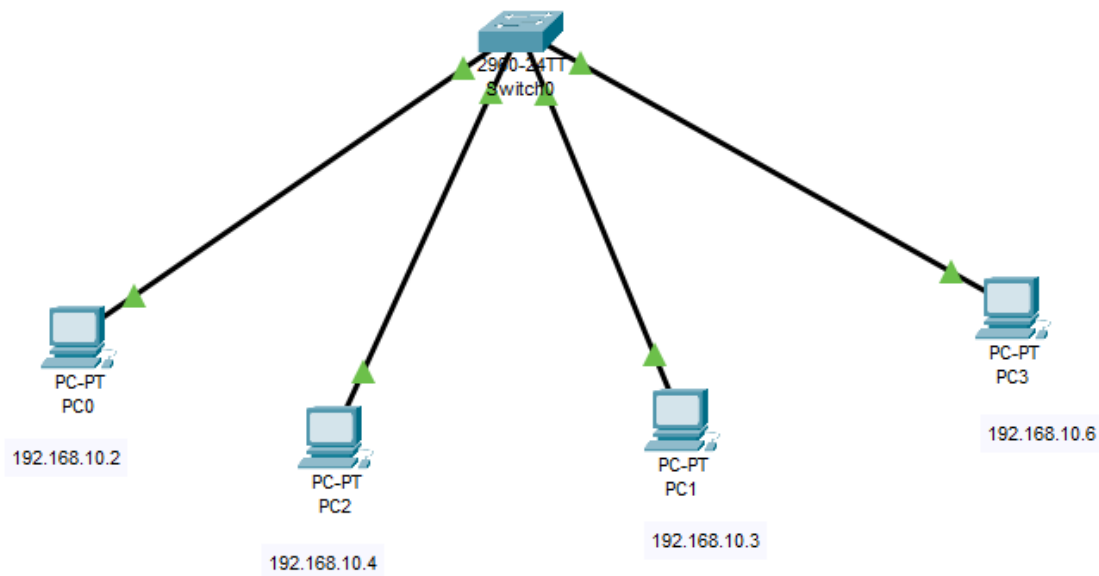
A 1: **Real-time**: Real-time is typically considered to be at the time that the code is running or as the action is happening

**Simulation**: Simulation is a technique, a software program that models the behaviour of a network by calculating the interaction between the different network entities (routers, switches, nodes, access points, links etc.

**Ping**: Ping is a quick and easy utility to tell if the specified server is reachable and how long will it take to send and receive data from the server

Q 2: Perform these simulation method connecting more than 2 PC's.

A 2



## In Ping

```

Control-C
^C
C:\>ping 192.168.10.4

Pinging 192.168.10.4 with 32 bytes of data:

Reply from 192.168.10.4: bytes=32 time=2ms TTL=128
Reply from 192.168.10.4: bytes=32 time<1ms TTL=128
Reply from 192.168.10.4: bytes=32 time=1ms TTL=128
Reply from 192.168.10.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
C:\>

```

```

Packet Tracer PC Command Line 1.0
C:\>ping 192.168.10.2

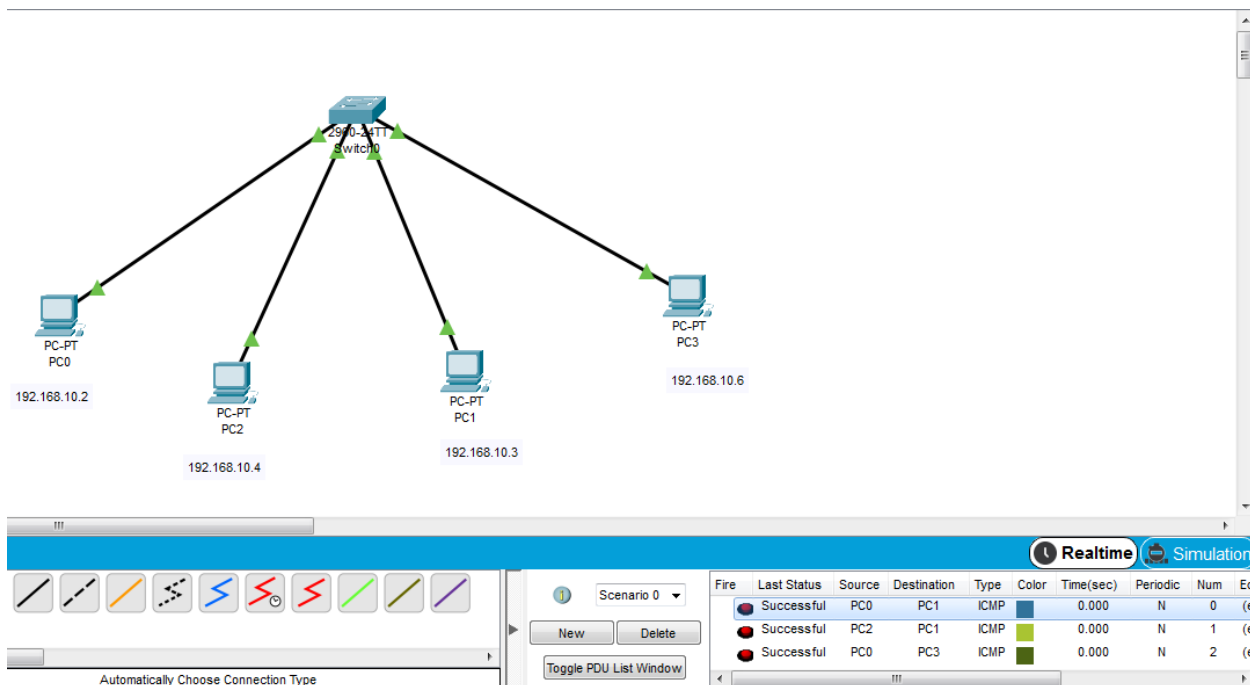
Pinging 192.168.10.2 with 32 bytes of data:

Reply from 192.168.10.2: bytes=32 time=1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128
Reply from 192.168.10.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>

```

## ➤ Real Time



## ➤ In Simulation

